Chapter 5. Trends to Watch

I. Chapter Overview

This chapter provides an overview of some of the many issues impacting the competitive landscape for telecommunications services in California. This chapter begins with a look at market entry and exit, providing information on the competitors in California's telecommunications marketplace. In addition, the chapter discusses concerns with the current state of the telecommunications marketplace, including consumer information and service quality issues. Finally, the chapter provides information about various actions that the CPUC is undertaking to foster competition in the state and provide consumers with a broad choice of service providers.

II. Market Entry and Activity

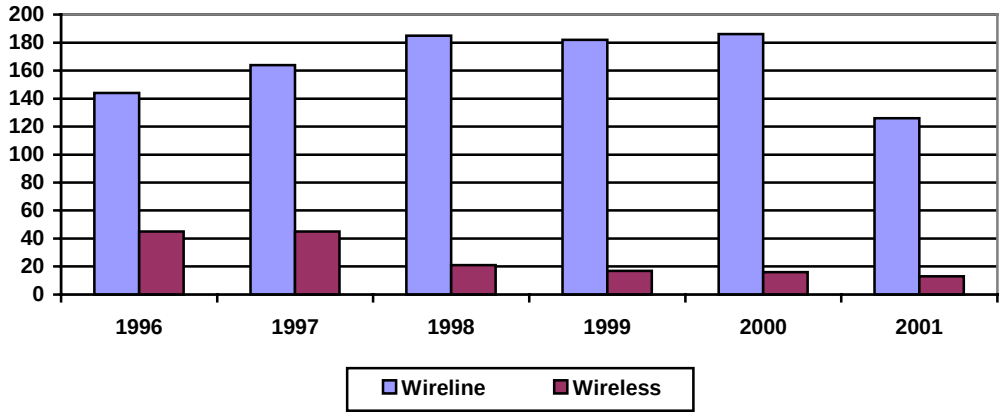
A. Wireline License Applications Stable While Wireless in Decline

In gauging the state of competition in the telecommunications industry, staff examined how many new firms are entering and exiting the market each year.[1] To gain a general picture of the potential (not actual) number of new carriers in a given year, staff considered the number of licenses granted to authorize service. In order to become a new telecommunications service provider in California, CLECs, IXCs and wireless[2] carriers are required to obtain authorization from the CPUC. This authorization is called a Certificate of Public Convenience and Necessity (CPCN). Figure 5.1 shows that the total number of new wireline CPCNs rose until 1998, then reached a plateau, and remained stable at about 185 new licenses each year through 2000. 2001 has seen a severe decline in new CPCNs, perhaps due to the economic downturn that has affected the telecommunications industry nationwide. In the wireless market, the number of newly licensed carriers has been continually decreasing. It should be noted that the number of CPCNs overstates the number of actual entrants into the market. While wireline and wireless carriers are required

[1] See Section III below for a discussion of market exit.
[2] Decision 96-12-071: Entry into the market by wireless carriers is not under the direct jurisdiction of the CPUC, and while they must register for authorization to provide service, such carriers are not subject to any sort of approval process.

to apply or register with the CPUC for authorization in order to begin providing any kind of service, many carriers choose not to initiate such service.

Figure 5.1
Applications to Become New Wireline & Wireless Carriers in California



Source: Wireline and Wireless data derived from CPUC records of new carrier CPCNs and wireless registrations.
* Wireline applications consist of CLECs/IXCs, as no new ILECs have entered California in this time period.

The total number of carriers who have received authorizations to serve in the state has more than doubled since 1997, as detailed in Figure 5.2 below. Again, it should be noted that the authorization to provide service does not equate to the actual provision of service. By 2001 there were over 1,800 licensed carriers in California; however, far fewer are actually in operation. It is relatively easy and inexpensive for a qualified carrier, particularly one that is not building new facilities, to obtain authorization to provide telephone service. It is far more complex and expensive to actually provide telephone service, which, at a minimum, involves marketing, selling, and billing for services rendered.

Table 5.2: Licensed Telecommunications Carriers in California, 1996-2001*+					
	1997	**1998**	**1999**	**2000**	**2001+**
ILECs	26	22	22	22	22
CLECs [3]	104	209	256	303	350
IXCs [4]	504	857	938	1018	1098
Wireless Carriers[5]	192	246	241	270	362
Total	**826**	**1,334**	**1,457**	**1,613**	**1,832**

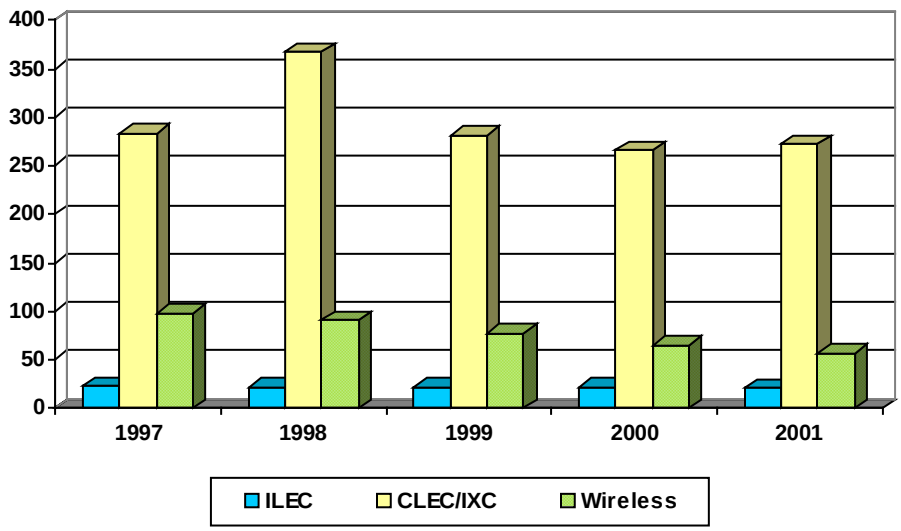
Source: Data taken from CPUC oracle database (UCS) on utility companies
* Total figures in Table 5.2 likely include significant double-counting, as many carriers (or their affiliates) are registered in 2 or more of the carrier groups, i.e. ILECs, CLECs, IXCs, and/or Wireless
+ Includes data through September 2001 only

B. Number of Carriers Remitting Surcharges

A better measure of the number of carriers actually participating in California's telecommunications markets is to examine data regarding surcharges that carriers are obligated to remit to the CPUC for public programs (such as lifeline service) each year. Because all carriers earning intrastate revenues are required to collect and remit surcharges, the number of carriers remitting surcharges provides an indication of the number of carriers actually serving customers. By this measure, as shown in the graph below, in 2001, there were 350 total carriers operating in California (21 ILECs, 272 CLECs/IXCs[6], and 57 wireless carriers).

[3] Includes both facilities-based CLECs and CLEC resellers
[4] Includes both facilities-based long distance carriers and long distance resellers. Also, there may be some overlap between the number of long distance carriers and CLECs since some carriers provide both local and long distance services.
[5] Includes wireless carriers who provide the following services: cellular, cellular resale, paging, personal communications services (PCS), radio telephone utilities, facilities-based commercial mobile radio services (CMRS), and resale CMRS services.
[6] For this measure, it was not possible to segregate CLECs and IXCs.

Figure 5.3
Carriers in Operation Remitting Surcharges in California



As shown in Figure 5.3, the number of ILECs remitting surcharges has remained fairly constant from 1997 to 2001, although, through mergers, their number has slightly decreased from 23 to 21 carriers. While the number of CLECs/IXCs grew initially after the local market was first opened in 1996, over the five-year period, the number of CLECs/IXCs has fallen slightly (283 in 1997 to 272 in 2001). In contrast, the number of wireless carriers remitting surcharges has decreased more significantly each year, from 98 in 1997 to only 57 in 2001, especially due to the decline in wireless resellers in California. While the number of wireless carriers in operation has declined, wireless retail revenues (as noted in Chapter 4) have increased. Those divergent trends are consistent with information presented in Chapter 4, that fewer carriers are collecting ever-increasing revenues, and thus an established core group of wireless providers prevails while weaker providers exit the market.

C. CLECs Depend More on Facilities-Based and UNE Modes of Entry and Less on Resale

Data demonstrates that CLECs in California depend more on facilities-based and UNE modes of entry into the state's telecommunications marketplace and less on resale. As noted in Chapter 2, a CLEC may enter a local telecommunications market in several ways or a combination of them, i.e.: a) develop their own facilities that connect customer premises to the telecommunications network, b) resell the telecommunications services of another carrier, or, c) lease discrete parts of the existing network called UNEs.

As illustrated below, CLECs in California have a higher preference for using the facilities-based mode of entry as compared with the nationwide trend for local markets. CLECs in California provided about 45 percent of their local telephone lines over their own facilities at the end of 2000 (see Table 5.4). By contrast, CLECs nationwide provided about 35 percent of their local telephone lines over their own facilities at the end of 2000.

Table 5.4
CLEC Local Telephone Lines in the U.S. and in California by Mode of Entry
1999-2000 (in Thousands)[7]

Date	# of CLEC's Reporting	Total Local telephone lines	CLEC Owned Lines[8]	% of Lines Owned	Acquired Lines[9]	% of Lines Acquired
California						
December 2000	24	1,493	672	45.0%	821	55.0%
December 1999	24	840	343	40.8%	497	59.2%
Nationwide						
December 2000	87	16,397	5,748	35.1%	10,649	64.9%
December 1999	81	8,318	2,847	34.2%	5,471	65.8%

ILEC data also provides some clues about CLEC mode of entry since CLECs have the option of leasing lines for resale and leasing UNE loops from ILECs. (see Table 5.5 below). Looking at the modes of entry individually, the data indicates that the number of UNE loops that ILECs leased to other carriers in California more than doubled between December 1999 and December 2000 (from 181 to 435). By contrast, the growth in lines resold to other carriers in California is much lower (about 4 percent) for the same period. Hence, at this early stage, CLECs appear to rely more on leasing UNE loops as a mode of entry than on resale.

Table 5.5
FCC Data on Total ILEC Facilities in California By Function
1999 – 2000[10] (In Thousands)

				Lines Provided to Other Carriers		
Date	***# of ILECs Reporting***	***Total Facilities***	***Local telephone lines***	***Lines Resold***	***UNE Loops Leased***	***Total***
December 1999	8	23,754	23,168	405	181	586
December 2000	8	24,323	23,467	421	435	856
% Change 1999-2000	-----	-------	--------	4.0%	140.3%	46.1%

[7] Source: *Local Telephone Competition Status As of December 31, 2000,* Table 3 as well as data gathered from responses to FCC Form 477 for the periods ending December 31, 1999 and December 31, 2000 for carriers operating in California.
[8] Lines provided over CLEC-owned "last mile" facilities
[9] Lines acquired from other carriers as UNE loops or under resale arrangements.
[10] Source: *Local Telephone Competition Status As of December 31, 2000*, Table 4 and FCC Form 477 data for the periods ending December 31, 1999 and December 31, 2000 for California carriers.

Additional data gathered by the CPUC suggests that the number of resale lines in the state peaked in 2000 and is declining[11]. According to that data, the lines ILECs resold to other carriers experienced a vast increase between 1996 and 2000, from about 17,000 to about 413,000 lines (see Appendix F). By June 30, 2001, the ILECs reported that the number of lines they resold to other carriers fell to about 280,000. This drop in resold lines is likely related to the trend in CLEC closures and service reductions, discussed later in this Chapter.

D. Pacific Bell's Long Distance Market Entry Under Review By CPUC

The CPUC is currently reviewing Pacific Bell's application to enter California's long distance market and is determining whether or not to endorse that application before the FCC. Section 271 of TA '96 allows RBOCs, such as Pacific, to enter the long distance market only after they each prove that they have opened their respective local markets to competition. Section 271 details a 14-point checklist that Pacific must meet in order to prove that it has irreversibly opened its local market to competition from CLECs. Although the FCC is the final arbiter regarding long distance entry, TA '96 gives state commissions a role in determining whether the RBOCs' local markets are open to competition. The FCC places great reliance on each state's assessment.

In addition to the checklist items, the CPUC has been reviewing three other important and complex aspects of Pacific's service to competitors in order to assess the extent to which the local market is open to competition. Specifically, they are: (1) CLECs' non-discriminatory access to Pacific's Operations Support Systems (OSS)[12], (2) the process and procedure for resolving on-going operational issues between Pacific and the CLECs, and (3) the establishment of a Performance Incentive Plan to help assure Pacific will continue to provide the same level of services to its CLEC customers in the local market as it does for itself should it receive Section 271 approval. Since CLECs depend on Pacific's network to provide service to their customers in California, many CLECs contend that resolution of

[11] ILECs reported the number of resale lines they provided to other carriers and CLECs reported the number of resale lines they leased from other carriers. Generally, the CLEC data shows a similar downward trend in resale lines as the ILEC data. The differences between the ILEC and CLEC data is likely sampling error since only 9 of the ILECs and CLECs in California were asked to provide data to the CPUC for this report.

[12] The OSS is a system of computer servers, software and personnel that Pacific and other RBOCs rely upon to receive process and provision service orders from their retail customers. OSS also provides billing, maintenance and repair capabilities for both Pacific and CLECs, who depend on Pacific's systems to serve their customers. TA '96 requires Pacific to give CLECs non-discriminatory access to its OSS, since CLECs will be subject to a competitive disadvantage if they receive services from Pacific that are inferior to those that it generates on its own behalf. Regardless of how well a CLEC is performing internally, the service it can provide its customers will be only as good as the OSS service it receives from Pacific.

these issues is crucial to having a "level playing field" for providing a true alternative to Pacific.

The process for evaluating Pacific's application has been complex and labor intensive. Staff's initial review of the application determined that Pacific had satisfied only four of the 14 checklist items outlined in Section 271. Over the intervening review period, the CPUC has provided numerous staff reports, guidelines and requirements, as well as Commissioner and Administrative Law Judge rulings, concerning Pacific's compliance with the Section 271 checklist and FCC orders. The CPUC has held weeks of collaborative workshops and several multiple-day hearings, involving Pacific and many CLECs and other interested parties, and has collected thousands of pages of formal filings, affidavits, monthly status reports, and data responses from parties. In early March 2002, the CPUC completed its Performance Incentive Plan review for Pacific, adopting a plan that should assure future on par service for CLEC competitors if Pacific is given Section 271 approval. The plan identifies how payments by Pacific will be tied to sub-par performance results, how any payments made will be increased if performance worsens, and how they will be shared between competitors and ratepayers.

The CPUC expects to resolve remaining Section 271 issues and forward its formal recommendations on Pacific's application to the FCC in 2002. If and when the FCC subsequently authorizes Pacific's entry into the state's long distance market, CPUC staff will be monitoring the effects of that event on our local and local toll markets.

III. Market Consolidation and Exit

A. Trend Toward Cross-Sector Consolidation

i. Merger Activity in Telecommunications

Telecommunications markets are in flux, as carriers not only continue to enter, but also join together or even go bankrupt and leave the marketplace. This sort of market consolidation (e.g. mergers and closures) can have a detrimental effect on competition. Simply put, fewer carriers equate to less choice. Closures and service withdrawals directly reduce the number of carriers consumers can chose from. In addition, as carriers merge and expand their size and control, the overall number of players in the industry is shrinking, and the remaining dominant carriers may find it easier to reassert market power.

From 1996 to 2000, 14 mergers and acquisitions occurred in the California wireline market.[13] Of these, most have occurred among IXCs, with 4 acquisitions and 6 mergers. Each of the IXC carriers merged with another California IXC, thereby decreasing the overall number of players in the long distance market. In the local market, there was only one merger among CLECs (Campuslink Communications merged into Patec Communications), yet three acquisitions among ILECs (Citizens acquired two smaller California ILECs, and Verizon acquired one[14]), meaning that some incumbents have consolidated and joined forces. Unlike the national trend whereby mergers and acquisitions are providing carriers with new services (e.g. cable or DSL), the consolidation in California is mainly among like carriers, enlarging companies' customer bases, but not their capabilities.

Prior to 2000, mergers and acquisitions had been uncommon among most wireless carriers in California. However, since then, dominant national carriers have drawn together, and created new mega-carriers. In April 2000, Verizon Communications arose from the merger of Vodafone AirTouch with Bell Atlantic and GTE, and by combining their wireless services, they created the nation's largest wireless service provider. Also in 2000, SBC Communications (including Pacific Bell) and BellSouth entered into a joint venture, to combine their wireless networks under the new name of Cingular Wireless, becoming the second largest wireless network in the United States.

AT&T has also been striving to expand its wireless networks. AT&T acquired shares of Cellular One (their networks in the San Francisco Bay Area and San Diego) from Vodaphone AirTouch (which was forced to sell off its shares due to conditions in the Vodaphone's merger agreement with Bell Atlantic and GTE). AT&T's previous, yet unsuccessful merger attempts have included a coupling with British Telecom (the United Kingdom's dominant phone company), and business-oriented Nextel Communications.

Nationwide, the telecommunications market has experienced the same movement towards mergers and acquisitions. SBC merged with Pacific Telesis (which includes Pacific Bell) back in 1997, with Ameritech in 1999, and also formed a strategic alliance with Williams Communications (advanced fiber-based ATM backbone network) that same year. MCI joined forces with Worldcom in 1998. AT&T merged with TCI (cable) in 1999, MediaOne (cable) in 2000, and acquired NorthPoint Communications' (DSL) assets in 2001. In 2000,

[13] Data taken from CPUC oracle database (UCS) on archived utility companies
[14] Citizens acquired CP National Corporation and Tuolumne Telephone Company, while Verizon acquired Contel Service Corporation

Bell Atlantic and GTE formed Verizon, Qwest merged with US West, and Covad (DSL) formed a strategic alliance with Pacific Bell.

ii. Failed Mergers And Consequences

Not all merger attempts have been successful. The proposed merger between Ameritech and Qwest was blocked by the FCC, and the potential mergers between Sprint and Worldcom, and Verizon and NorthPoint Communications failed as well. While it had already invested $150 million in the DSL provider, Verizon withdrew from its proposed merger with NorthPoint due to the latter's declining financial standing. Without the financial help it would have received from the merger, NorthPoint began closing its network without warning, cutting off service to the Internet Service Providers (ISPs) it sold service to, thus leaving thousands of end-users without Internet access. In California alone, 40,000 business and consumer customers were affected, effectively stranded without broadband service[15].

In the Verizon-NorthPoint case, the lack of a merger hampered competition in that a carrier went out of business because it could not obtain the necessary capital in order to stay in operation. In addition, as NorthPoint fell, it took other carriers with it, because when the smaller ISPs lost their supply of DSL service, ISP customers switched back to more "reliable" ILEC sources of DSL service. Thus, the dominant firms benefited from NorthPoint's business failure.

B. Economic Downturn Limiting Competition

CLECs, IXCs, and advanced service providers have all suffered with the economic downturn in 2000. Fledgling telecommunications carriers and dot.coms alike began to crumble as stock prices fell and as financing options disappeared. The cycle perpetuated itself, as more companies failed, financial markets continued to fall, and capital became even scarcer. This trend has continued into 2001 and 2002, as carriers spent millions to create and extend their networks, and were left with huge debts that many could not repay. The telecommunications sector has seen a wave of bankruptcies as a result, as well as attempts to shed unprofitable ventures, and service reductions.

[15] Source: Mercury News "NorthPoint Ordered to Restore Services", March 30, 2001

Closures have been especially prevalent among broadband service providers, affecting carriers of cable Internet, fixed wireless (and satellite internet service), and DSL services. In the DSL market, NorthPoint, Zyan (of Los Angeles), Flashcom, Bazillion, Rhythms NetConnections, and Covad, (with 330,000 customers) all filed for bankruptcy in 2001. Covad reemerged from bankruptcy December 20, 2001, but such recovery has been rare. The cumulative impact of such closures has been extremely disruptive to consumers. For example, 83,000 Rhythms customers nationwide faced great inconvenience with the abrupt loss of service, and were left to find new broadband service providers. In addition, as noted previously, the collapse of Northpoint forced 40,000 California customers to scramble to find new DSL providers.

Table 5.6
Carriers Filing for Bankruptcy or Ceasing Operations

2000	2001	2002
Digital Broadband Communications	Broadband Office Communications	Adelphia
GST Telecommunications	Cable & Wireless USA	Advanced TelCom
ICG Communications	Convergent Communications Services	Long Distance Direct
Integrated Teleservices	Covad	Global Crossing
Prism Communications	Essential.com	McLeodUSA
Twister Communications Network	FirstWorld (Socal, Anaheim, Orange Coast)	Network Plus
	Inet Interactive Networksystem	Williams Communications
	Mpower Communications**	Winstar
	Net2000 Communications	XO Communications
	NorthPoint Communications	Yipes
	Onsite Access Local	
	OpTel Telecom	
	Rhythms Links	
	Sprint Communications Company*	
	Starlink Communications	
	Teligent Services	

* Sprint Communications Company has received CPUC approval to withdraw from providing local exchange services.
** The carrier has withdrawn from specific areas, but has not completely withdrawn from all service areas.

The downturn among broadband carriers is continuing from 2001 into 2002. After announcing its plans to both divest itself of its Broadband (cable) division, as well as exit the fixed wireless market, AT&T sold its assets to Netro in January 2002. That same month, Global Crossings, lacking necessary funding, filed for Chapter 11 bankruptcy protection. The high-speed network provider suffered from huge debt, and a glut on the fiber optic

market, which resulted in decreased demand and sinking stock prices. Another fiber provider, McLeodUSA shortly followed suit the same month, and Yipes, a broadband for business provider, filed in March 2002 under a huge debt load. Competitive local exchange carriers have been hit hard these last two years as well. Among the CLECs declaring bankruptcy in 2001 are Adelphia, Teligent and Winstar, with Mpower and Network Plus declaring in 2002. Regardless of the reason for closures, when the number of operating carriers is decreasing, the consumers' choice is decreased and the level of competition is diminished.

C. Decline in Demand for Number Resources Corroborates Market Consolidation and Service Reductions

As described earlier, one key input to competing in the state's local telecommunications market is telephone number resources. When local telecommunications were provided in a monopoly environment, only the ILECs needed telephone numbers in order to serve their customers. However in today's marketplace, facilities-based CLECs also need telephone numbers to serve customers and compete with ILECs[16].

Recent data on CLEC requests for number resources corroborates the trend toward market consolidation and service reductions for these carriers. As CLEC offerings in California's marketplace shrink, it is expected that CLEC demand for number resources would correspondingly decline. Table 5.7 demonstrates that the quantity of CLECs applying for numbering resources declined since 2000. The quantity of CLECs that applied for number resources in California fell from 33 to 25, comparing the first quarters of 2000 and 2001. That represents about a 22% decline. By the first quarter of 2002, the quantity of CLECs remained at about the same reduced level as they had been in the first quarter of 2001. Examining the data for the entire year suggests continued reductions. While a total of 52 CLECs applied for number resources by the end of 2000, only 40 did so by the end of 2001. Given that only 27 CLECs applied for numbers by the end of April 2002, the yearly total for 2002 is expected to be even smaller than it was by the end of 2001.

[16] Certain wireless carriers also require telephone numbers to service to customers. Wireless carriers are discussed in detail in Chapter 4.

Table 5.7 Quantity of CLECs Applying for Number Resources in California: 2000 – 2002*		
	First Quarter	*Entire Year*
2000	33	52
2001	25	40
2002	26	27*

Source: Number Allocation Lottery and Number Pooling Data for California derived from databases of the CPUC and Neustar, January 2002-April 2002
* Data does not include an entire year for 2002. It includes data through April 2002 only.

IV. Consumer Issues With Competition

A. Inadequate Information for Service Choices

While competition can promote lower prices, innovation, and improved service quality, competition also can present some challenges and hazards for consumers. For competition to have its intended benefits, customers need to understand their choices and to have sufficient access to information on which to base their choices. Customers who are confused by their options and unaware of their rights in a competitive marketplace are more vulnerable to improper behavior by carriers. Among the challenges that consumers face in competitive telecommunications markets are gathering information to make an informed choice of carrier, comparing rate plans with a variety of different terms, and understanding technical issues such as the difference between interLATA and intraLATA calling. As some service providers seek to secure multi-year service contracts, a lack of information can cause consumers to get trapped into long-term arrangements with one carrier.

However, the Commission is completing work on adopting a Telecommunications Consumer Bill of Rights, and a corresponding set of comprehensive consumer protection rules.[17] These rights and rules would address the following areas: disclosure, choice, privacy, public participation, oversight and enforcement, accurate bills and redress. Through these safeguards, consumers will be able to make better-informed choices and know how to protect themselves from improper behavior by carriers.

[17] CPUC Rulemaking 00-02-004.

B. Service Quality Complaints

Consumers are also concerned with service quality. After billing questions, service quality is the next most common topic of complaint by consumers for local (ILEC and CLEC) service providers. The CPUC continues to receive large numbers of complaints regarding ILEC service quality, ranging from 1,929 to 3,839 complaints a year between 1995 and 2000. Complaints regarding CLEC service quality have ranged from 113 to 1,141 complaints a year between 1998 and 2000[18]. The large number of consumer complaints runs counter to the general increase in the number of wireline entrants from 1996 to 2000 and the expectation that the introduction of new carriers would yield more intense competition and better service. In the case of CLECs in particular, increasing customer complaints may be the result of an increasing customer base.

Service quality has also been an issue in the long distance market. Consumers have encountered deceptive marketing practices, inaccurate billing, slamming[19] or cramming[20]. Our statistics show that since 1997, disputed bills have been the principal reason for complaints about long distance carriers, despite efforts by the CPUC and FCC to reduce slamming and cramming. In fact, the high incidence of slamming and cramming caused the Legislature – with the support of the CPUC and consumer groups – to make changes in the law in 1999 that implemented new consumer protections. These changes have enabled the CPUC to be more proactive in its efforts to stem the proliferation of cramming and slamming incidents in California. The CPUC's *Report to the Legislature on Slamming and Cramming* details the Commission's efforts, and explains that California has experienced a 40% reduction in the number of cramming complaints received by the CPUC between 1999 and 2000, and a further reduction of 36% between 2000 and 2001. Slamming complaints dropped by 13% between 1999 and 2000, but increased by 59% between 2000 and 2001.[21]

C. Other CPUC Efforts on Behalf of Consumers

The CPUC has been working to foster competition and open markets for consumers. It is Commission policy to encourage consumer choice, and it has been asserted in Commission

[18] There were no CLEC complaints in 1995 and 1996 and only one complaint in 1997.
[19] "Slamming" is the illegal practice of changing a consumer's telephone service - local or long distance service - without permission. http://www.fcc.gov/slamming/
[20] "Cramming" is a term used to describe the practice of placing unauthorized, misleading, or deceptive charges on consumers' telephone bills. http://www.fcc.gov/Bureaus/Common_Carrier/Factsheets/cramming.html

reports that efforts to promote competition will only be effective if consumers have access to information in order to make such choices.[22] Since consumers cannot make informed decisions when access to relevant information is lacking, the CPUC is taking action to improve carriers' disclosure practices. As recently as July 2001, the Commission has established Interim Rules[23] to protect consumers from unauthorized charges and to further consumers' access to information in the marketplace. These new rules include mandates for carriers to have subscribers "opt-in"[24] for noncommunications-related charges, to keep track and investigate customer complaints, and to format their billing statements in a non-misleading, clear manner. Phase 2 of the Commission's New Regulatory Framework (NRF) for Pacific Bell and Verizon (D.89-10-031) will attempt to assess how ILEC service quality has fared since its adoption. The ILECs will have to file reports with the CPUC, and customer surveys may be carried out to best judge service quality. The results from Phase 2 will aid the Commission in its consideration of whether and how NRF should be revised to achieve the Commission's goal of high-quality service.[25] Moreover, two other CPUC decisions fortified protections for consumers and help ensure that they can make informed choices among telecommunications services. D. 01-07-026 requires carriers to post price information on the Internet and D.02-01-038 strengthened the rules regarding customer notice when utilities transfer customers, withdraw service or change prices.

V. Statutes, Legislation, and Regulatory Action Affecting Competition

Section 316.5 of the California Public Utilities Code directs the CPUC to conduct a review of any statutes that might impede or discourage competition in or deregulation of the telecommunications marketplace. In addition, the CPUC is required to make recommendations to the Legislature on the statutes that should be amended, repealed, or enacted to enhance and reflect the competitive telecommunications environment, and/or promote the orderly deregulation of the telecommunications industry. The CPUC's review of current statutes and legislation in California did not uncover any that appear to impede or discourage telecommunications competition or deregulation. Correspondingly, the CPUC does not currently have any recommendations for the Legislature in this area.

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[21] Some part of this increase is due to FCC rule changes that now permit complainants to file interstate slamming complaints with state regulatory commissions.
[22] Consumer Protections for a Competitive Telecommunications Industry: Telecommunications Division Staff Report and Recommendations. February 3, 2000
[23] CPUC Decision 01-07-030
[24] The "opt-in" method is a grant of a one-time authorization for specific services, which can be revoked by the subscriber at any time.

Of note to the Legislature, however, are the various steps the CPUC is taking to enhance the development of competition and improve choices of telecommunications providers available to customers in California[26]. In addition to Pacific's 271 application for long distance market entry and its work on consumer oriented issues relating to competition, the CPUC is addressing several issues which affect California's telecommunications marketplace. These issues are:

a) Examination of UNE prices charged to ILEC Competitors
b) Review of the New Regulatory Framework for ILECs
c) Access and Choice for DSL Service
d) Number portability for wireless carriers

A. UNE Prices That Promote Efficient Competition

As noted earlier, one way for CLECs to compete with ILECs in the local market is for them to lease discrete parts of an ILEC's network called UNEs in order to serve customers. Given that the ILECs are often in the position of being the monopoly supplier of UNEs to CLECs and are also competitors with CLECs in the local market, the ILECs have an incentive to keep UNE prices high in order to limit the opportunities of their competitors. To provide an environment in which local competition can grow in California and in which consumers have adequate choice, the CPUC has, therefore, actively monitored and set the UNE prices that will promote efficient competition.

The CPUC initially determined what prices Pacific could charge for UNEs in 1999 and also set up an annual process to consider adjustments to recurring UNE costs and prices[27]. In 2001, several CLECs[28] submitted applications to review the costs and prices of unbundled loops and switches. In response, the Commission initiated the UNE reexamination proceeding to address the applicants' requests and subsequently issued D.02-05-042 on May 16 2002 as an interim measure toward lowering UNE rates. As a result Pacific's UNE loop

[25] Order Instituting Rulemaking on the Commission's OwnMotion to Assess and Revise the New Regulatory Framework for Pacific Bell and Verizon California Incorporated. Rulemaking 01-09-001. Investigation 01-09-002.
[26] In addition to the CPUC activity highlighted here, see Appendix J for a timeline of CPUC regulatory activities on competition in 1984 and 2002.
[27] CPUC Decision D.99-11-050 adopted Pacific's initial UNE prices. According to D.99-11-050, the UNEs that are eligible for review are those that have experienced at least a 20 percent cost change from the costs approved in D. 98-02-106.
[28] In February 2001, two CLECs, AT&T Communications of California, Inc., Worldcom, Inc. and The Telephone Connection Local Services, LLC, requested the review of UNE costs and prices.

rate is reduced by 15.1 percent from $11.70 to $9.93 and UNE switching rates became 70 percent lower on average.

The Commission also has before it the matter of setting and monitoring UNE costs and prices for Verizon[29], the second largest ILEC in the state. After the CPUC rejected Verizon's initial cost studies[30], Verizon filed a new UNE cost model with the Commission. While AT&T and MCI Telecommunications Corporation[31] filed an alternative cost model, the CPUC issued a decision (D.98-02-106) in a sister phase of this proceeding that concluded that the AT&T/ MCI model had too many structural infirmities to be used as the basis for UNE costs and prices. Verizon recommended that the CPUC suspend efforts to set costs and prices for UNEs until U.S. Supreme Court activity on these matters was concluded[32]. The CPUC rejected this recommendation and cited its intention to go forward with setting Verizon's UNE costs and prices based on the existing record as well as additional information[33]. Moreover, the CPUC may set interim costs and prices for a subset of UNEs, since the process of evaluating the various recommendations on the final costs and prices will likely be complex and lengthy[34].

B. Review of the New Regulatory Framework (NRF) to Promote Competition and Service Quality

Since 1989 the CPUC has regulated the state's ILECs (Pacific, Verizon and Roseville Telephone Company) through an incentive-based, rather than a cost of service type, program. Termed the New Regulatory Framework (NRF), this program is intended to rely on financial incentives and shareholder and ratepayer safeguards to achieve the policy goals of (1) universal service, (2) economic efficiency (3) technological advancement, (4) industry financial and rate stability, (5) full local exchange network utilization, and (6) elimination of cross-subsidies and anti-competitive behavior. The CPUC reviews the NRF to assess its ongoing effectiveness for each ILEC every three years.

The Commission's fourth triennial review of the NRF for Pacific and Verizon began in September 2001, and is being conducted in three phases. Phase 1, which is nearly completed, involves a review of an audit performed on Verizon's cost allocations, accounting practices and procedures, affiliate transactions, the company's tracking and

[29] Verizon California, Inc. was formerly known as GTE California, Inc.
[30] See D.96-08-021.
[31] Now known as WorldCom, Inc.
[32] See Verizon's Post-Prehearing Conference Statement, p. 2, dated September 11, 2000
[33] *Assigned Commissioner and Administrative Law Judge's Ruling Setting Scope of This Phase and Announcing Technical Workshops*, p. 4, dated November 11, 2000
[34] Id.

allocation of costs for non-regulated activities, and the safeguards in place to protect ratepayer and competitor interests with respect to non-regulated activities. The CPUC will identify and pursue any needed corrective regulatory measures as a result of audit findings in this phase of its review.

In Phase 2, the Commission will review issues arising from the results of an audit of Pacific's operations that was released in February 2002. This independently conducted audit concludes that Pacific failed to comply with various CPUC accounting and regulatory requirements from 1997 through 1999 and underreported almost $2 billion in profits during that period. It recommends customer refunds of about $350 million. The CPUC will be formally reviewing this audit and allowing parties to submit testimony. As a part of Phase 2, the CPUC will also be reviewing the current state of service quality provided by both companies.

Finally, Phase 3 will assess whether there is a need to reestablish, modify or eliminate original elements of the NRF program, such a rate cap provision and a procedure for sharing telephone company profits in excess of a benchmark level with ratepayers and shareholders. These original NRF elements were suspended in the course of prior triennial reviews.[35] All phases of this current NRF review are scheduled to be completed by the spring of 2003.

C. CPUC Seeks to Preserve Access and Choice for DSL Service

The CPUC's efforts to promote competition also includes advocacy before the FCC. The CPUC has recently taken positions in two key FCC dockets that will affect how broadband services are delivered to consumers. In February 2002, the FCC proposed reclassifying the regulatory framework for the transport portion of broadband access to the Internet from "common carriage" to "private carriage".[36] This change of classification would remove the regulatory obligations of interconnection and unbundling for those providers of the transmission facilities for information services, including DSL service. In almost all cases, ILECs have monopoly control over of the "last mile" of transmission facilities, also known as the local loop, necessary to provide DSL service.

[35] The reestablishment of rate caps and earnings revenue sharing mechanisms are also issues being considered by the Legislature in AB 2898 (Pescetti) and AB 2958 (Wright). If AB 2898 becomes law as currently written, the CPUC will be prohibited from implementing rate caps or sharing mechanisms under the NRF until at least January 1, 2007. If instead AB 2958 becomes law in its present form, these NRF prohibitions will be limited to Pacific and Verizon.
[36] NPRM in FCC Common Carrier Docket No. 02-33 issued February 15, 2002.

In light of the TA '96's goal of furthering the deployment of advanced telecommunications services to all Americans, the CPUC has urged the FCC to continue to include facilities-based DSL service as a common carrier transmission service subject to unbundling obligations. In Comments filed in May, the CPUC has pointed out that removing the interconnection and unbundling obligations from the ILECs would impair the potential for consumer choice and access to broadband services in California.[37] As noted above, forty-five percent of California residents with broadband access live in areas where DSL is the only option for broadband Internet access. Cable modem, satellite, and wireless methods of broadband access are not comparable alternatives at this point. Therefore, allowing ILECs to control the transmission segment of DSL service would essentially pave the way for monopoly control of DSL service.

In a separate but related proceeding, the FCC has raised the question of deregulating the broadband services provided by the ILECs in order to spur investment, innovation, and lower prices.[38] Some have suggested in the proceeding that cable modem, satellite and wireless methods of broadband access have become acceptable alternatives for the broadband offerings of the ILECs, typically DSL and ISDN.[39]

The CPUC has taken the position that deregulation of these broadband services would be premature. Because the ILECs are still the dominant provider of wireline broadband services, deregulation "would jeopardize the continued ability of the FCC and the States to ensure that services used for the transmission of voice telecommunications continue to be available at high quality and reasonable rates."[40] The CPUC noted that cable modem, satellite, and wireless broadband options are not available to as many consumer groups as is DSL service. While it is true these options exist in the national market, it is the local market that matters for each consumer, since a local provider is necessary for broadband access. Until multiple broadband providers serve each of the local markets, deregulating the ILECs will stymie investment, innovation and competition.

[37] Comments of CPUC filed May 3, 2002 in FCC Common Carrier Docket No. 02-33
[38] NPRM in FCC CC Docket No. 01-337 issued December 20, 2001.
[39] ISDN refers to Integrated Services Digital Network, an advanced service that was not discussed in this initial competition report. ISDN is essentially is a service provided by local telephone companies which modifies regular telephone lines so that they can transmit data almost five times as fast as the fastest analog modems. ISDN also allows the transmission of not only data, but a combination of data, voice, and video simultaneously on one line.
[40] Comments of CPUC filed April 22, 2002 in FCC Common Carrier Docket No. 01-337

D. Local Number Portability

i. Wireline Number Portability of Growing Importance to CLEC Local Market Share

Switching Phone Numbers: A Barrier to Competition – In an openly competitive telecommunications marketplace, consumers need to be able to choose and move freely among multiple telecommunications service providers. Especially in the local telephone market, consumers may be deterred from switching to a new service provider if switching requires consumers to assume a new phone number. Congress, the FCC and the CPUC addressed this problem by requiring most wireline phone companies to allow customers to switch between phone service providers while retaining their original telephone number.[41] The process of switching is called number porting.

Number Porting in California – Local phone number porting among wireline carriers began in California in May 1998. At the end of 2000, 32 local service providers were on record as active participants in number porting; either having lost customers that had taken their numbers to a competitive provider, or having gained customers that had brought their number with them. Only a small percentage of California customers, however, exercise the number porting option. After over three years of experience with number portability (from May 1998 to July 2001), about 5 percent of the local market[42] had switched service providers while retaining the original phone number and remaining a customer of the alternative provider as of July 2001.[43]

Based on the data, number porting is none-the-less more critical to CLECs than to ILECs competing in the state and, thus, the CPUC supports it continued use. Most number porting is used to enable customers to leave ILECs in order to take service from a CLEC. While ported customers account for a small net loss to ILECs, they constitute a significant share of the CLEC customer base. While less than 5 percent of ILEC customers ported to CLECs, this flow of customers contributes to at least one quarter of all CLEC business and is growing. At the end of 2000, the nearly 1.2 million numbers ported to CLECs accounted for 25 percent of CLEC assigned customers. By July 2001, the over 1.6 million numbers ported to CLECs comprised 29 percent of CLEC assigned customers. If number porting

[41] Section 251(b)(2) of the 1934 Communications Act as added by the 1996 Telecommunications Act, and First Report and Order and Further Notice of Proposed Rulemaking, 11 FCC Rcd. 8352, Paragraph 165.
[42] Market share in this paragraph is determined by percentage of numbers assigned to customers.
[43] The 5 percent accounts for those customers that were still with the competitive service provider as of July 2001. It does not account for customers that switched providers and then returned to the original provider before July 2001.

were not available, CLECs would presumably lose one quarter of their local market share.[44] The percentage of the customer base that CLECs gain from those customers that do port numbers may be crucial to their survival.

Seven dominant CLECs operating in California benefit the most from porting. Of the numbers ported to CLECs at the end of 2000, 88 percent went to these CLECs. Of the numbers ported to CLECs by July 2001, 83 percent went to the same seven CLECs[45].

ii. Wireless Number Portability Could Increase Competition

The FCC has mandated that the wireless industry implement number portability by November 24, 2002.[46] Many wireless carriers have opposed the mandate. On July 26, 2001, Verizon Wireless petitioned the FCC for relief from the requirement to deploy number portability on the basis that the extent of competition in the wireless industry is sufficient without it. A decision on this petition is pending with the FCC.[47]

The CPUC believes that wireless number portability is crucial to enhancing competition in the wireless industry as well as between the wireline and wireless industry. The CPUC supports the FCC's previous conclusions that number portability is essential to a competitive marketplace. In response to the Verizon Wireless petition and in other filings before FCC, the Commission has argued in favor of retaining the November 24, 2002 deadline for wireless number portability, citing TA '96, "which evinced a Congressional intent for competition to develop among and within all telecommunications markets." [48]

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[44] Assuming that these customers would not switch carriers if they had to change their telephone numbers.
[45] The seven CLECs are: Allegiance Telecom of California, Inc., AT&T Communications of California, Inc., Cox California Telecom, LLC, Focal Communications Corporation, MPower Communications, Pac-West Telecommunications, Inc., and XO Communications.
[46] First Report and Order in the Matter of Telephone Number Portability, Docket No. 95-116, FCC 96-286, Paragraph 4
[47] As of November 15, 2001.
[48] Comments of the California Public Utilities Commission and of the People of the State of California filed with the FCC in CC Docket No. 99-200 and WT Docket No. 01-184 on September 21, 2001.